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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/763,040 | 01/21/2004 | Brian A. Lipp | 35056-512 | 6990 |

7590 06/26/2008
Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

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| EXAMINER |
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DIXON, ANNETTE FREDRICKA

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| ART UNIT | PAPER NUMBER |
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3771

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| MAIL DATE | DELIVERY MODE |
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06/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/763,040 | Applicant(s) LIPP, BRIAN A. | |
| | Examiner Annette F. Dixon | Art Unit 3771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,8,11,14-18 and 46-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,8,11,14-18 and 46-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/21/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the request for continued examination filed on March 26, 2008. Examiner acknowledges claims 1-3, 5, 8, 11, 14-18, and 46-48 are pending in this application, with claims 1-3, 5, 8, 11, 14-18, and 46-48 having been currently amended, and claims 4, 6, 7, 9, 10, 12, 13, and 19-45 having been cancelled.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 26, 2008 has been entered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 8, 11, 14-18, and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Stasz (US Patent 5311875)

As to Claim 1, Stasz discloses a sensor comprising a flexible substrate (12), a flexible transducer (10), first and second electrical contacts (22 and 24), protective covering (14 and 16), at least one flexible lead (32).

As to Claim 2, Stasz discloses a protective covering (14 and 16) that substantially covers the flexible transducer (10).

As to Claim 3, Stasz discloses a protective covering (14 and 16) that substantially covers the flexible transducer (10) and the first and second contacts (22 and 24).

As to Claim 5, Stasz discloses the transducer to comprise resistive ink. (Column 1, Lines 54-62).

As to Claim 8, Stasz discloses the flexible substrate to have a first and second side (18 and 20), the first and second contacts are affixed to the first side of the substrate, the third contact (36) is affixed to the second side of the substrate and is in communication with the first electrical contact (22) and the fourth contact (34) is affixed to the second side of the flexible substrate and is in communication with the second electrical contact (24); wherein, the first and third contacts are in communication and the second and fourth contacts are in communication.

As to Claim 11, Stasz discloses an air inlet-covering portion. (Please see Figure 3).

As to Claim 14, Stasz discloses the contacts (22 and 24) are affixed to the mounting portion (28).

As to Claims 15-16, Stasz discloses the electrical value of the transducer changes in proportion to the flexure of the substrate and that the value increases as the substrate is flexed. (Please see Column 3, Lines 9-19).

As to Claim 17, Stasz discloses the flexible substrate is made of polyimide. As described in applicant's specification polyimide is a non-conductive and flexible material. (Please see Column 3, Lines 9-19).

As to Claim 18, Stasz discloses the sensor is placed in the nares of the patient and thus are positioned in the stream of moving air.

As to Claim 46 and 47, Stasz discloses the transducer (10) is affixed to the lead (32). (Please see Figures 1 and 2).

Response to Arguments

5. Applicant's arguments filed March 26, 2008, have been fully considered but they are not persuasive. Applicant asserts: 1) there is "no flexible lead" structure in Stasz, 2) there is no first and second contact in Stasz, 3) the differences between resistive ink and metallized piezoelectric film, 4) the current invention does not attach to the user's skin, 5) the polyvinylidene fluoride polymers only contributes to voltage due to temperature changes, 6) polyvinylidene fluoride polymers are different from polyimide polymers, and 7) Stasz does not have a one way valve. Examiner respectfully disagrees with Applicant's assertions. Regarding assertions 1, prior art Stasz discloses the breathing sensor is flexible (Abstract). Regarding assertion 2, prior art Stasz discloses a first contact 22 and a second contact 24 which are placed within each nostril

(Figure 3). Regarding assertion 3 (related to Claim 5), as addressed in page 6 of Applicant's remarks, filed 2/26/08, Applicant uses the restive ink for another function different from that of the prior art. Applicant is advised, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Regarding assertion 4, the assertion of the current invention not requiring contact with the user's skin is a statement of intended use. Applicant is reminded, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Regarding assertion 5, it is noted that the features upon which applicant relies (i.e., polyvinylidene fluoride polymers) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Regarding assertion 6, the instant claims only recite, "polyimide" (Claim 17). Furthermore, as recited in Applicant's specification Paragraph 0024, Applicant teaches "TEFLON® and KAPTON®" are polyimides. As known in the art, polyimides are thermoplastics as is polyvinylidene fluoride polymers (PVDF). In regards to Applicant's assertions of polyvinylidene fluoride polymers, please see assertion 5. Regarding assertion 7, the claim language recites "the sensor forms at least a portion of a one-way valve", this

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recitation gives way to the possibility that the sensor is defining a portion or passageway for the one way valve and another structural portion is used to direct the flow within the valve. Applicant is reminded, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Thus, in light of the aforementioned reasoning the rejection of the claims has been maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette F. Dixon whose telephone number is (571) 272-3392. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Annette F Dixon
Examiner
Art Unit 3771

/Annette F Dixon/
Examiner, Art Unit 3771

/Justine R Yu/
Supervisory Patent Examiner, Art Unit 3771